

colon of the psoas muscle incident to exercise. They have no inflammation in the colon, neither spastic nor atonic, and all normal colons are benefited by the right amount of exercise. Having lost the "call" to evacuation, they are assisted in regaining it by exercise. Teaching the patient to regain the lost "call" is an important part of the treatment of rectal constipation. It is accomplished by regularity in habits. Effort at evacuation should be made following each meal, since the taking of food into an empty stomach is the strongest known stimulation to peristalsis.

Psychology—As was mentioned under "Etiology," psychology can inhibit as well as stimulate intestinal activities. Patients just becoming addicted to cathartic and enema habits should have explained to them the A B C of colon physiology, thus dispelling from their minds fears of toxicity, fecal impaction, biliousness, etc. Their minds will dwell upon the subject, and it is best for them to think along correct lines. After bowel movement has been established, they will cease to dwell constantly upon it.

The patient should be impressed with the fact that their bowels will move without assistance when we get out of the way with irritations and causes of inflammations; that is, patients need help to get their thoughts into correct channels, for their thoughts are undoubtedly of great help towards success in this treatment.

SUMMARY

1. Cause of constipation is the same in both spastic and atonic cases—i. e., inflammation in the gut.
2. Curing the inflammation will therefore cure both types of cases.
3. Treatment is therefore identical in either case.
4. Treatment consists in stopping cathartics, enemas and irritating foods. Giving heat to abdomen, intestinal powder, rest in bed, and a gradual return to bulky food after the colon heals.

Doctors in Congress—Each State of the Union has two Senators. There are two doctors in the United States Senate. These are Senator Ball of Delaware and Senator France of Maryland. Senator Spencer of Missouri is a lawyer with an honorary degree of M. D. Senator Ball's term will expire in 1924, while the commission of Senator France will expire in 1923.

In the House of Representatives there are nearly four hundred and fifty members. Six of these are graduates of medical schools. Two of the six are from the State of New York—Congressman Kindred and Congressman Volk. Delaware, Louisiana, New Jersey, and Washington are the other four States represented by men with M. D. degrees, these being, respectively, Representative Layton, Representative Lazaro, Representative Olpp, and Representative Summers.

Representative Woodruff of Michigan is a graduate of the department of dentistry of the Dentist College of Medicine; Representative Edmonds of Pennsylvania is a graduate of the Philadelphia College of Pharmacy.

One and one-half of one-tenth of 1 per cent of the total membership of the two houses of Congress is small representation for the great medical profession of the United States.—Bulletin of the A. M. A.

EDUCATIONAL STANDARDS IN PHYSIOTHERAPY *

By RAY LYMAN WILBUR, M. D., Stanford University

It is a pleasure to have this opportunity to say something in favor of the physiotherapist, since I have the feeling that by proper standards (I use the term standards with trepidation in regard to the education of these workers) he or she can meet an urgent need.

When we speak of educational standards we recognize first, that we must have the fundamental standard and second, the technical standard. The fundamental side refers to an understanding of the basis of the practice of the profession, whatever it may be—and the technical part has to do with the knowledge and ability to apply the various forms of treatment.

Now, I think that we have in this present field of physiotherapy certain elements of danger, because of the emphasis so often put on technique without basic fundamental knowledge. In the present Medical Practice Act of the State of California an effort was made to delineate a fundamental training for both physicians and so-called drugless practitioners and to make a separation, at a point where treatment began, between those giving drugs and using the knife and those using the physical therapeutic agents.

This is very important, because we are so apt if we do not know a subject well to be very sure of ourselves in methods of known procedure. The more we know, the less sure we become. Consequently, we have to be very careful in this field not to develop a rather sloppy attitude. We are apt to start off and do just what we did in the training of nurses, that is, teach therapy without the underlying fundamentals.

The one primary essential is to have an idea as to the cause of the patient's disorder. Chester Rowell stated recently that you can always distinguish the quack from the true physician, because the true physician tries to find out what is the matter, while the quack is inclined to take the diagnosis made by the patient. I think this is absolutely sound. One attempts to get at the real facts, and the other is satisfied with only treating symptoms. These can wisely be treated for the patient's comfort of body and ease of mind when the factors causing them are being studied or are understood. In dealing with the sick, diagnosis is primary. Particularly in dealing with the subject of physiotherapy, where our problem is the relief of symptoms, it is important not to fail to have this background of the patient's condition.

Now, what are the first things to be done by a person who is preparing to practice physiotherapy? He or she must know something of biology. We can not deal with life unless we know what life is. Some form of biology must be studied, whether this is zoology or botany or both. Then, there must be knowledge of anatomy. It does not have to be the minute knowledge required in the practice of

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surgery, but it does have to include a thoroughly sound grasp of the essentials of human anatomy. Naturally, one must also have a good appreciation of the functions of the human body or physiology. In addition, any one dealing with the sick must know bacteriology and understand the relation of micro-organisms to disease. He also must have some idea of chemistry and know something of physics and the general features of psychology. I should say that as a background for all forms of dealing with the human body we must know something of biology, anatomy, bacteriology, chemistry and physics.

We would not care to take our automobile for repair to any one who knows nothing of its make-up or how it works. He should know something of the physics of the machine and should be an expert in the fundamentals of anatomy of the machine as well as the parts and materials from which it is made.

Unless we know, for example, the histology of the human skin, the physiology of the heat points and the cold points of the skin, how are we going to be able to understand the fundamental factors underlying the use of various methods of physiotherapy? In fact, we must ask all of those who engage in this field to understand the major facts concerned in the physiology of the vasomotor system.

So it is necessary to have an understanding of the skin, its physiology and diseases and especially a general knowledge of the vasomotor system and the effect of the method we are going to try upon them. That necessarily means that we must also know something of the body, circulation, respiration, and their relationships to the skin and the underlying tissues, which we expect to affect by our chosen form of treatment. Naturally, if we do not understand the main lesions of the skin, if we do not, for instance, know the local action of streptococci and other bacteria we will be lacking in a fundamental type of knowledge that one must have for intelligent handling of the sick. It is clear then that we must have a practical working knowledge of biology, anatomy (including histology), physiology, bacteriology, chemistry and physics if we are to treat the human body for its ailments. If we give a person a douche of the spine, we must understand insofar as it is known just what takes place in his body because of it. Besides, we must possess beforehand acquaintance with the patient's condition so that what is done may be consistent and logical. No matter how skilled we are we may do more harm than good if we do not have this point of view.

Now, frankly, one thing that the physiotherapist can use readily as a guide is the so-called sense of well-being of the patient. People "feel better" if they have the proper reaction, and those reactions do not take place if the treatment causes more damage than good.

We must also recognize in all of these procedures their effect upon the general metabolism, for the body of man is a machine which is being built up and torn down all the time. Physical therapy may accelerate either process.

The physiotherapist has a very important intimate personal relationship with the patient. The contact is an immediate contact while that of the physician sometimes is more formal. When the physiotherapist assumes this close relationship with the patient he or she *must* understand psychology to use this relationship so as to get the best results, mere mechanical effort will secure only 50 or 75 per cent of good results desired.

It seems to be quite clear that granted that we get a group of men and women interested enough in physiotherapy they will see that they get the proper amount of information. It is essential that they get their training under the best possible auspices. There is responsibility upon the medical profession to provide such training for those who want it and are prepared to receive it.

The proper training of the physiotherapists of the future will have to be some two or three years of college education at a minimum, including the subjects that we have mentioned, so that we may be sure that they have sufficient knowledge of bacteriology, physiology, anatomy and other fundamentals. To this should be added one or more years of practical work in the hospital clinic with good instructors. All the necessary training in the technical procedures should be under the guidance of the medical profession. It would be a sad thing to banish the physiotherapist from the great medical centers where his influence and assistance is most needed.

As the medical profession takes more and more hold of this problem, it must do so seriously. I feel that the State should work out a license plan for the physiotherapist. In fact, I feel convinced that we can not trust the treatment of diseases of the human body to any one, even as technical assistants to physicians, who has not the basic knowledge. The licentiates should include the properly educated physiotherapist in this State and there should be provision for adequate education for those others who wish to prepare themselves for the work.

My suggestion to this organization is to endeavor to establish a course of training and to get this recognized by the State and made acceptable to the medical profession. If you are going to organize this field, the standards must be high enough to keep out the ignorant and unscrupulous. Otherwise, hundreds of people with only a common school education, without any special training, will be brought in, and the name is apt to fall into disrepute and the profession become the refuge of broken-down boxing masters who empirically use its methods in a symptomatic way. You must bring into your profession and daily work the facts of which the most important are the fundamentals mentioned. Physiotherapists must maintain their dignity as a profession. The dignity of the profession depends primarily upon knowing what you are about and doing it.

Fire Risks of Hospitals—During the years of 1919 and 1920, there were as many as 870 fires in the classification "hospitals, asylums and sanitariums," in the United States.—Underwriters' Report.